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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,798	09/10/2003	Karsten K. Bohlmann	13913-153001 / 2003P00562	1815
32864 7590 01/17/2007 FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER INGBERG, TODD D	
			ART UNIT 2193	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/17/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/658,798	<b>Applicant(s)</b> BOHLMANN ET AL.	
	<b>Examiner</b> Todd Ingberg	<b>Art Unit</b> 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/11/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1 – 49 have been examined.

Claims 40-49 have been added through a Preliminary amendment on June 30, 2004.

#### ***Drawings***

1. New drawings of October 25, 2004 have been accepted.

#### ***Specification***

2. The preliminary amendment of June 30, 2004 has been added.
3. Applicant is requested to amend the Specification to include the following Provisional Application serial number on page one of the Specification and the proper paper work to draw continuity to the priority date if needed or deleted the reference.

#### ***Information Disclosure Statement***

4. The Information Disclosure Statement filed March 11, 2004 has been considered.

#### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 35-44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical

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application can be provided by a physical transformation or a useful, concrete and tangible result. No physical transformation is recited and additionally, the final result of the claim is for converting formats which is not a tangible result because the result is not clearly claimed to be on a computer readable medium. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1 – 49 are rejected under 35 U.S.C. 102(a) as being anticipated by XSLT Working with XML and HTML, Khun Yee Fung (referred to as X) published December 28, 2000. (See Library of Congress Printout of Copyright Information – taped to inside cover of book).

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**Claim 1**

X anticipates a method for transforming application data structures into an XML document (X, XLST, Chapter 2 and example page 177), the method comprising:

(a) writing an application program having data structures (X, pages 176 – 177 example and Chapter 7 constructs) ;

(b) writing a transformation program (X, constructs of Chapter 7 and example page 176-177);

(c) executing the application program (Required to produce result on page 177);

(d) executing the transformation program when called for by the application program to transform the data structures from the application program into an XML document (X, constructs of Chapter 7 and example page 176-177) ; and

(e) sending the XML document to a recipient (X, pages 178 – 179, sending it to the recipient of the same work station is a possibility as claimed).

**Claim 2**

The method of claim 1, wherein executing the transformation program further comprises executing the transformation program on a dedicated virtual machine. (x, page 241 – many mentions of Java through out)

**Claim 3**

The method of claim 2, wherein the virtual machine runs on a web application server. (x, page 239).

**Claim 4**

The method of claim 1, wherein writing the transformation program further comprises compiling the transformation program into a byte-code language. (X, page 6 and JAVA – claim 2)

**Claim 5**

The method of claim 4, wherein executing the transformation program further comprises executing the compiled transformation program on a dedicated virtual machine. JVM part of JAVA as per claim 4.

**Claim 6**

The method of claim 1, wherein the transformation program is written in markup language syntax. As per claim 1 XSLT is XML which is a mark up language.

**Claim 7**

The method of claim 1, wherein the transformation program includes a construct for reading a value within the data structures and writing the value to the XML document. as per claim 1.

**Claim 8**

The method of claim 1, wherein the transformation program allows for literal XML elements, attributes, and text that appear within the transformation program to be written to the XML document. (X, page 93,95, 186-187).

**Claim 9**

The method of claim 1, wherein the transformation program includes a construct for specifying attributes to be written to the XML document. (X, tree see elements as per claim 1).

**Claim 10**

The method of claim 1, wherein the transformation program includes a construct for declaring namespaces in the XML document. (X, pages 412-413, Namespace)

**Claim 11**

The method of claim 1, wherein the transformation program includes a construct for skipping program instructions. (X, page, 161)

**Claim 12**

The method of claim 1, wherein the transformation program includes a construct for copying elements from data structures to the XML document. (X, page 342-343)

**Claim 13**

The method of claim 1, wherein the transformation program includes a construct for calling another transformation program. (X, page 169, call)

**Claim 14**

The method of claim 1, wherein the transformation program includes a construct for applying a transformation template associated with another transformation program called by the application program. (X, xsl: - and routine - e.g. page 167)

**Claim 15**

The method of claim 1, wherein the transformation program includes a construct for looping over data structures while creating the XML document. (x, Looping, pages 167 - 168).

**Claim 16**

The method of claim 1, wherein the transformation program includes a construct for executing conditional logic to create certain XML content within the XML document.

**Claim 17**

The method of claim 1, wherein the transformation program used to convert the data structures into the XML document can be used to convert the XML document back into data structures. (X, page 71-82).

**Claim 18**

X anticipates a method for transforming an XML document into application data structures (X, Chapter 4), the method comprising:

- (a) writing an application program configured to use data structures (X, tree of chapter 4);
- (b) writing a transformation program (X, program examples of chapter 4);

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- (c) executing the application program (X, Chapter 4, Examples show results);
- (d) executing the transformation program when called for by the application program to transform an XML document into data structures for the application program (X, page 71-82); and
- (e) using the data structures within the application program (Program examples of Chapter 4 and page 85).

**Claim 19**

The method of claim 18, wherein executing the transformation program further comprises executing the transformation program on a dedicated virtual machine. As per the rejection for Claim 2.

**Claim 20**

The method of claim 19, wherein the virtual machine runs on a web application server. As per the rejection for Claim 3.

**Claim 21**

The method of claim 18, wherein writing the transformation program further comprises compiling the transformation program into a byte-code language. As per the rejection for Claim 4.

**Claim 22**

The method of claim 21, wherein executing the transformation program further comprises running the compiled transformation program on a dedicated virtual machine. As per the rejection for Claim 5.

**Claim 23**

The method of claim 18, wherein the transformation program is written in a markup language syntax. As per claim 6.

**Claim 24**

The method of claim 18, wherein the transformation program includes a construct for reading a value within the XML document and writing the value to the data structures. (X, pages 71-82)

**Claim 25**

The method of claim 18, wherein the transformation program includes literal XML elements that are matched in the XML document. As per the rejection for Claim 7.

**Claim 26**

The method of claim 18, wherein the transformation program includes a construct for matching the name of an attribute in the XML document. (X, page 147, figure 6.9)

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**Claim 27**

The method of claim 18, wherein the transformation program includes a construct for matching a namespace declaration in the XML document. As per the rejection for Claim 8.

**Claim 28**

The method of claim 18, wherein the transformation program includes a construct for skipping program instructions. As per the rejection for Claim 11.

**Claim 29**

The method of claim 18, wherein the transformation program includes a construct for copying elements to the data structures from the XML document. As per the rejection for Claim 12.

**Claim 30**

The method of claim 18, wherein the transformation program includes a construct for calling another transformation program. As per claim 13.

**Claim 31**

The method of claim 18, wherein the transformation program includes a construct for applying a transformation template associated with another transformation program called by the application program. As per claim 14.

**Claim 32**

The method of claim 18, wherein the transformation program includes a construct for looping over content from the XML document while creating the data structures. (x, Looping, pages 167 – 168)

**Claim 33**

The method of claim 18, wherein the transformation program includes a construct for executing conditional logic to create certain data structures. As per claim 16.

**Claim 34**

The method of claim 18, wherein the transformation program used to convert the XML document into data structures can be used to convert the data structures back into the XML document. As per claim 1 - example.

**Claim 35**

X anticipates an application system comprising: a first process configured to execute an application program (X, XLST, Chapters 2 and 7, see example page 177), wherein the application program is operable to use a set of data structures(X, pages 176 – 177 example and Chapter 7 constructs) ;

a second process configured to interpret a markup language document (X, process of creating tree in Chapter 2);

a transformation template configured to specify a symmetric mapping between the



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markup language document and the set of data structures(X, Chapter 12 – case study using templates and pages 176 – 177 example and Chapter 7 constructs) ;  
; and a transformation virtual machine running in association with the first process and operable to execute the transformation template (X, pages 263 – 309, Templates) ; wherein the transformation virtual machine is operable to perform a symmetric transformation between the markup language document (X, Chapter 2, tree ) and the set of data structures to allow the first process and the second process to exchange information(Result of transformations as per above).

**Claim 36**

The application system of claim 35 wherein the first process is an ABAP virtual machine running on an application server. As per claim 3.

**Claim 37**

The application system of claim 35 wherein the second process is one of a client processor and a server processor configured to communicate with the application server. As per claim 3.

**Claim 38**

The application system of claim 36 further comprising a database configured to communicate with the application server, wherein the database is operable to store at least one of XML data and non-XML data (X, page 239, XML and XLST and Servlet).

**Claim 39**

The application system of claim 36 wherein the application server is a web application server (X, page 23).

**Claim 40**

A method for enabling application data structures to be used at multiple times by one or more application programs (x, Looping, pages 167 - 168), the method comprising:

executing an application program, the application program using one or more data structures;

executing a transformation program when called for by the application program, the transformation program being configured to (1) transform the one or more data structures into extensible markup language (XML) content, the XML content including one or more XML structures corresponding to the one or more data structures, and (2) transform the XML structures of the XML content into the one or more data structures. As per claim 1.

**Claim 41**

The method of claim 40 further comprising storing the XML content in a data store from which the XML content may be later retrieved. (As per claim 1 – tree makes a namespace).

**Claim 42**

The method of claim 41 further comprising: accessing the XML content from the data store;  
executing the transformation program to transform the accessed XML content into the one or more data structures used by the application program; and

executing the application program using the one or more data structures. As per claim 1.

**Claim 43**

The method of claim 40 further comprising transmitting the XML content to an external location for transformation into a second set of data structures to be used by a second application program through execution of a second transformation program that is configured to transform the transmitted XML content into the second set of data structures. As per claim 1.

**Claim 44**

The method of claim 40 further comprising compiling the transformation program in preparation for the execution of the transformation program on a dedicated virtual machine. As per claim 3.

**Claim 45**

A method for enabling application data structures to be used at multiple times by one or more application programs, the method comprising:

executing an application program, the application program using one or more data structures;

executing a transformation program when called for by the application program, the transformation program being configured to (1) transform the one or more data structures into extensible markup language (XML) data, the XML data including one or more XML structures corresponding to the one or more data structures, and (2) transform the XML structures of the XML data into the one or more data structures. See the rejection for claim 40.

**Claim 46**

The method of claim 45 further comprising storing the XML data in a data store from which the XML data may be later retrieved. See the rejection for claim 41.

**Claim 47**

The method of claim 46 further comprising: accessing the XML data from the data store; executing the transformation program to transform the accessed XML data into the one or more data structures used by the application program; and executing the application program using the one or more data structures. See the rejection for claim 42.

**Claim 48**

The method of claim 45 further comprising transmitting the XML data to an external location for transformation into a second set of data structures to be used by a second application program through execution of a second transformation program that is configured to transform the transmitted XML data into the second set of data structures. See the rejection for claim 43.

**Claim 49**

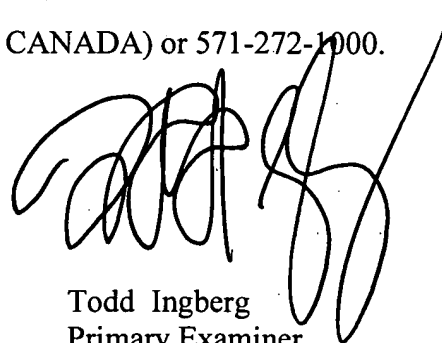
The method of claim 45 further comprising compiling the transformation program in preparation for the execution of the transformation program on a dedicated virtual machine. See the rejection for claim 44.

***Correspondence Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to be 'TI' followed by a stylized flourish.

Todd Ingberg  
Primary Examiner  
Art Unit 2193